

Ground Water Rule Triggered Source Monitoring Plan

Checklist D

Wells Representing Coliform Monitoring Locations in the Distribution System. This relates to situations in which a system has multiple wells but not all wells provide water to each routine total coliform sample collection site in the distribution system. In this case, only those wells that hydraulically represent (provide water to) a specific routine total coliform sample site would need to be sampled under the triggered monitoring plan. The required information for TSMP review includes:

1. Detailed map(s) of distribution system showing the locations of:
 - a. Each active well, labeled with pws well name/number and TCEQ Water Source Code;
 - b. Each TCR distribution sample site, labeled with pws name/number;
 - c. Pressure plane boundaries with each pressure plane labeled with pws name/number;
 - d. Significant valves between pressure planes, labeled with pws name/number.

2. A table of active water wells in the pws listing:
 - a. The name/number of the well;
 - b. Operational status of the well (active, demand (seasonal), emergency (only used for short emergency use), etc.);
 - c. TCEQ water source code used for the well;
 - d. Well depth;
 - e. Completed well drill date.

3. A table of significant valves in the distribution system (between pressure planes) listing:
 - a. Valve name/number;
 - b. Type of valve;
 - c. Valve status (open, closed, pressure-reducing, etc.);
 - d. Pressure plane(s) interconnected by valve.

4. A table of Total Coliform Rule (TCR) routine monitoring sample site locations listing:
 - a. Unique name/number for sampling site (cannot be longer than 12 characters);
 - b. Address of sampling site;
 - c. Description of the sampling site (faucet; flush plug; etc.).

5. A table relating each TCR routine monitoring sampling site with each of the water wells providing water to it listing:
 - a. Name/number of distribution sample site;
 - b. Each water well name/number;
 - c. Each water well TCEQ Water Source Code.

6. If pws provides groundwater to another pws, provide table showing:
 - a. Pws Id and name of water buyer(s);
 - b. Well name/number that is used to provide water to buyer;
 - c. Well TCEQ Water Source Code.

7. If pws used hydraulic modeling to determine relationship of wells to distribution sample sites, provide a written narrative describing the model parameters (high flow, average flow, low flow, settings and why those settings were chosen to be representative of system conditions), calibration, name of model software, who provided model analysis (and their qualifications), and limits of model sensitivity.

8. A written narrative describing how the pws determined which wells provide water to the TCR routine monitoring sample site locations. Demonstrate that areas of the distribution system are consistently hydraulically disconnected due to elevation, pressure gradients, tank locations, or through valving. Is water flow possible from one zone to another but generally unlikely during normal operating conditions?

Note: A report listing each pws well, TCEQ Water Source Code, well information and unique ids for each well on file at the TCEQ Public Drinking Water Section is available for use in completing the TSMP report.

References:

Ground Water Rule Triggered and Representative Source Water Monitoring Guidance Manual, April 2009, EPA 815-R-09-003, <http://www.epa.gov/safewater>